# A new species of gecko, genus Cyrtodactylus, from Cape York Peninsula, Queensland, Australia

by G. J. Ingram<sup>\*</sup>

#### Abstract

*Cyrtodactylus galgajuga* sp. nov. is known only from the bare, black boulder mountains of the Trevethan Range near Cooktown, Queensland.

# Introduction

There are two species of *Cyrtodactylus* (*C. louisiadensis* and *C. pelagicus*) recorded from Australia, where they are found in the Torres Strait Islands and northeast Queensland (Cogger 1975). Both occur in New Guinea and *C. pelagicus* is also found on the islands of the south west Pacific (De Rooij 1915).

Recently Brown and Parker (1973) descrihed a new *Cyrtodactylus* from New Guinea and published a key to the species of the island. They used the pattern of the enlarged scales in the preanal region and on the under surface of the thighs for distinguishing the species. This was also found to be a useful diagnostic character for the new species described in this paper.

Abbreviations used in the text are as follows:— SVL, snout-vent length; TL, tail length; HW, head width; HDL, head length; AG, distance between the axilla and groin; FL, length of forelimb; HL, length of hindlimb; EW, eye width; TW, ear width; EN, distance between nare and anterior border of the eye; IN, internarial span. Ratios are given as percentages.

Cyrtodactylus galgajuga new species

# Holotype

Queensland Museum J29474, collected by G. J. Ingram and D. Miller, near Black Mountain (15° 40′ S. 145° 14′ E), Trevethan Range, 22 km S of Cooktown on 1 January, 1977.

#### Paratype

Australian Museum R70110, collected by W. Hosmer at the same locality as above, in early 1977.

# Diagnosis

A slim rock-dwelling *Cyrtodactylus* (plate I) with the preanal and femoral regions covered by enlarged scales relative to the smaller scales of the anal area and the posterior surfaces of the thighs (plate 2), ten well defined rows of tubercles at midbody, no lateral skin fold, and six purplish transverse bands between ear region and hind limbs.

# Distribution

Known only from the houlder mountains of the Trevethan Range, south of Cooktown, NE Queensland.

Description (meristics of holotype given first)

SVL 50 and 49. TL (tail of holotype broken) 119. HW/SVL 19 and 19. AG/SVL 42 and 42. FL/SVL 32 and 35. HL/SVL 53 and 50. HDL/SVL 29 and 29. EW/HDL 29 and 28. TW/HDL 8 and 9. EN/IN 50 and 50.

Head covered with small granules, smaller posteriorly and larger anteriorly; scattered pointed tubercles as far anterior as the interorbital region. Rostral large. Nostril bordered by the rostral, supranasal, first upper labial, postnasal and 2 small scales. Supranasals large, separated by one small scale. Upper labials 9, lower labials 7. Pair of postmentals separated hy a large mental. Ten well defined longitudinal rows of pointed dark tubercles on dorsal surface of

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- Plate 1

Cyrtodactylus pelagicus QM J25320, Home Rule, N.E. Queensland.
Cyrtodactylus galgajuga AM R70110 (paratype), Black Mountain, N.E. Queensland.
Cyrtodactylus louisiadensis QM J30063, 22 km E. of Chillagoe, N.E. Queensland (scale in centimetres).

midbody. Ventral surface covered by many small scales, becoming larger posteriorly (plate 2); scales between hind legs, very large and about twice the size of the surrounding scales; rounded scales on posterior surface of thighs very small, meeting larger flat scales of ventral surface of thighs which

are about twice their size. Scales surrounding vent are smaller than surrounding scales. Scales under tail are the largest ventral scales. No femoral or preanal pores. Number of lamellae under fourth toe 17 and 16. Palmar tubercles large and rounded. Tail cylindrical.

July/August, 1978



Under surface of thighs and tail of Cyrtodactylus galgajuga (scale in millimetres)

#### Colour in preservative

Dorsal surface of neck, body, tail and legs banded with purple-brown on a cream background. There are 6 bands on body, 4 on each leg and 7 on tail. Bands break up into purple and cream blotching on lower lateral surface of body. Head marbled with brown-purple and cream. Labials brownpurple. Ventral surface light brown; underside of tail lightly banded; ventral surface of toes and palms dark.

# Habitat

The Trevethan Range is composed of bare, black, blue-green algae covered granite boulders (Zweifel and Parker 1977) although each mountain in the Range has a few isolated trees. The huge boulders piled one on another form caverns in which C. galgajuga hides by day. At night they emerge to forage on the boulder faces.

On the night of 1 January, 1977, they were uncommon with five individuals observed in an area of about 3200 square metres. They were very difficult to approach and usually scampered for cover once their eyes were caught by torchlight.

# Etymology

"Galgajuga" is the territory name for Black Mountain in Gugu-Yalanji, the Bloomfield River language (Chris Anderson pers. comm.).

# **Comparisons with Other Species**

*C.* galgajuga is readily distinguished from the very large robust *C. louisiadensis* by its small size and delicate, gangly habitus (plate 1). It also lacks the lateral skin folds and the many rows of tubercles dorsally and laterally. The ventral scales in the preanal region and on the undersurfaces of the thighs are greatly enlarged on *C. louisiadensis* and the latter scales meet the smaller scales of the posterior surfaces of the thigh along a well defined demarcation line (plate 3). *C. pelagicus* is very similar to *C. gal*-

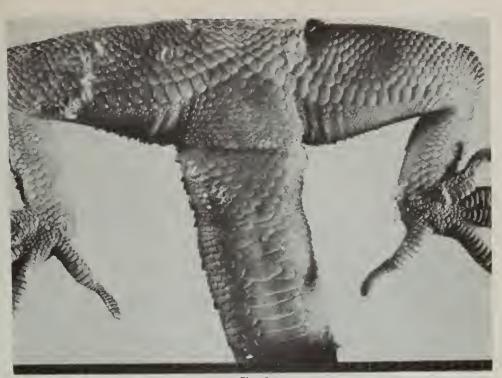


Plate 3 Under surface of thighs and tail of *Cyrtodactylus louisiadensis* (scale in millimetres).



Plate 4 Under surface of thighs and tail of *Cyrtodactylus pelagicus* (scale in millimetres).

gajuga but it differs with its robust neck, body, and legs (plate 1), greater number of rows of tubercles dorsally and laterally (greater than 13) with the tubercles more rounded, and with the ventral surfaces uniformly covered with small scales so that there is no difference in size of the scales on the undersurfaces of thighs and in the preanal region (plate 4).

# Remarks

*Cyrtodactylus galgajuga* is the third new species of vertebrate discovered from the boulder mountains of the Trevethan Range. The other two species restricted to this habitat, are a microhylid frog *Cophixalus saxatilis* (Zweifel and Parker 1977) and an undescribed lygosomine skink of the genus *Carlia* (Wells 1975).

#### KEY TO THE AUSTRALIAN SPECIES OF Cyrtodactylus.

| 1. | Preanal and femoral regions with one or more rows of distinctly        |                  |
|----|--|------------------|
|    | enlarged scales  | 2                |
|    | Preanal and femoral regions covered by relatively uniform small        |                  |
|    | scales (plate 4)   | C. pelagicus     |
| 2. | Lateral fold from axilla to groin with enlarged rounded tubereles;     |                  |
|    | preanal and femoral regions with greatly enlarged scales (plate 3);    |                  |
|    | maximum snout-vent length 16 cm  | C. louisiadensis |
|    | No lateral fold; preanal and femoral regions not with greatly enlarged |                  |
|    | scales (plate 2); maximum snout-vent length 5 cm                       | C. galgajuga     |

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